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(21) International Application Number: <b>PCT/US00/02374</b> (22) International Filing Date: <b>31 January 2000 (31.01.00)</b> (30) Priority Data: <b>09/245,828</b> <b>5 February 1999 (05.02.99)</b> <b>US</b> (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application <b>US</b> <b>09/245,828 (CON)</b> Filed on <b>5 February 1999 (05.02.99)</b> (71) Applicant (for all designated States except US): <b>REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 5th floor, 1111 Franklin Street, Oakland, CA 94607 (US).</b> (72) Inventor; and (75) Inventor/Applicant (for US only): <b>MATTREY, Robert, F. [US/US]; 2838 Albatross Street, San Diego, CA 92103 (US).</b> (74) Agent: <b>REITER, Stephen, E.; Gray Cary Ware &amp; Freidenrich, LLP, Suite 1600, 4365 Executive Drive, San Diego, CA 92121 (US).</b>		(81) Designated States: <b>AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</b>  Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: <b>DIAGNOSTIC IMAGING OF LYMPH STRUCTURES</b> (57) Abstract <p>In accordance with the present invention, there are provided methods for identifying the sentinel lymph node in a drainage field for a tissue or organ in a subject. In select embodiments, the invention allows for the identification of the first or sentinel lymph node that drains the tissue or organ, particularly those tissues associated with neoplastic or infectious diseases and disorders, and within the pertinent lymph drainage basin. Once the drainage basin from the tissue or organ, i.e., the sentinel lymph node, is identified, a pre-operative or intraoperative mapping of the affected lymphatic structure can be carried out with a contrast agent. Identification of the first or sentinel lymph node, on the most direct drainage pathway in the drainage field, can be accomplished by a variety of imaging techniques, including ultrasound, MRI, CT, nuclear and others. Moreover, once the lymphatic structure is identified as being associated with neoplastic or infectious diseases and disorders, the affected lymphatic structure can be removed surgically or by a suitable minimally invasive procedure to allow pathological analysis to be performed to determine whether certain diseases or disorders exist, without resort to more radical lymphadenectomy. Further, the agent can be made to carry diagnostic or therapeutic probes to be activated and/or delivered to the injection site or any part of the lymphatic pathway downstream from the injection site.</p>		